

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017404**Date Inspected:** 03-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Xu Tao**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment & Bike Path**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – NWIT Document No: 006841

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment Lift 13. The weld designations reviewed are as follows:

1. SEG3007AC-003
2. SEG3009A-002

Ultrasonic Testing (UT) – NWIT Document No: 006846

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment Lift 14. The weld designations reviewed are as follows:

1. BP3050-001-002

Bay 14

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This QA inspector observed ZPMC qualified welding personnel identified as 037996, 067589, 066258 perform Flux Core Arc Welding (FCAW) welding on OBG Segment 13BE & 13CE, weld joint identified as OBE13C-001. ZPMC QC is identified as Mr. Lv Li Qing. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

This QA inspector observed ZPMC qualified welding personnel identified as 044745 perform FCAW repair welding on vertical plate of OBG Segment 13CE, weld joint identified as VP3016-001-007. ZPMC QC is identified as Mr. Lu Li Qing. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-FCAW-2G (2F)-Repair, which is used as per Welding Repair Report (WWR) B-WRR-15475.

This QA inspector observed ZPMC qualified welding personnel identified as 044824 perform Submerged Arc Welding (SAW) Welding on deck plate splice joint of OBG Segment 13AE, weld joint identified as SEG3007-002. ZPMC QC is identified as Mr. Lv Li Qing. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

This QA inspector observed ZPMC qualified welding personnel identified as 020737 perform SAW Welding on bottom plate butt joint of OBG Segment 14W, weld joint identified as SEG3014-005. ABF QC is identified as Mrs. Lv Yun. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2c-S-2.

Bay 19

This QA inspector observed ZPMC qualified welding personnel identified as 058792 perform FCAW welding on Bike path, weld joint identified as BK004A6-007-092 and 093. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2233-Tc-P4-F.

This QA inspector observed ZPMC qualified welding personnel identified as 062752 perform FCAW welding on Bike path, weld joint identified as BK004A1-001-008. ZPMC QC is identified as Mr. Xu Tao. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS -B-T-2231-B-U2-F.

Description of Incident: During random in-process visual inspection of welds located on OBG Bike path at bay 19, this Quality Assurance Inspector (QA) observed that ZPMC personnel performing repair welding on bottom cover plate plug weld repair area with cracks. QA is visually found more than 10 spots transverse and longitudinal cracks around plug welded areas. ZPMC welding personnel performed welding over cracks. The cracks are not removed completely. This QA requested to ZPMC QC, to prepare critical welding report and remove the cracks and cross check with MT and after that perform welding on repaired areas. The bike path number is identified as BK004A-004. The weld is non Seismic Performance Critical Members (non SPCM). The thickness of the bottom cover plate is 6mm. This bike path is located at bay #19. The indications are clearly marked by QA on/near the weld. See the attached picture.

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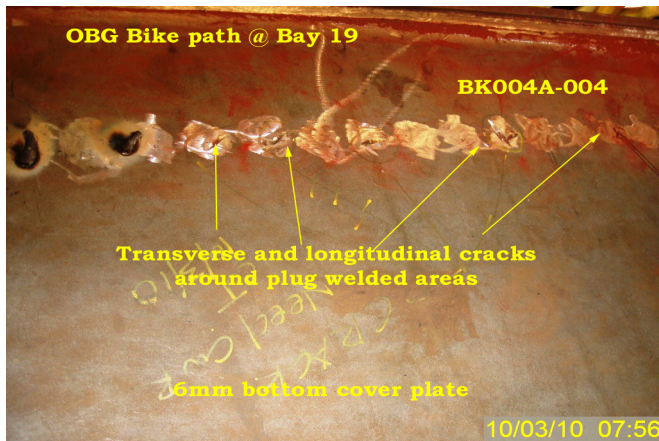
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Visual Inspection after Blast – Blast Shop 1

OBG Segment 11DW

This QA Inspector performed a preliminary random visual inspection on OBG Segment 11DW, after the grit blast of the exterior components of the deck panel, floor beams and corner assemblies of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

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Inspected By: Kumar,Vibin

Quality Assurance Inspector

Reviewed By: McClendon,Timothy

QA Reviewer